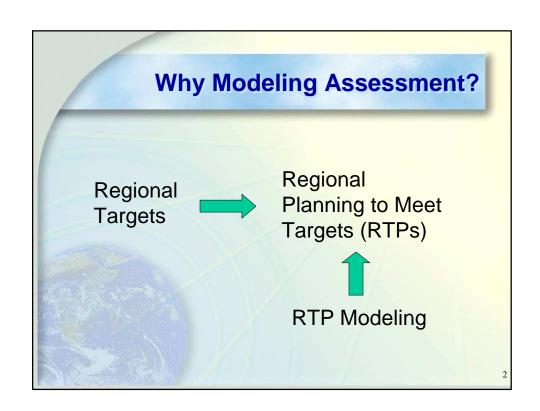
Regional Targets Advisory Committee March 4, 2009



Different Modeling Capabilities

- Recognized in CTC RTP Guidelines
 - 5 categories of regions
 - 5 recommendations regarding capabilities of transportation and land use modeling
- Raised in RTAC Workgroup Meeting
 - Recognize and understand different modeling capabilities
 - How should RTAC balance this relative to recommendations for target-setting?

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Modeling Assessment Survey

- Travel Demand Model
- Land Use Model
- Data Collection and Monitoring Programs

Factors Influencing Travel Demand *Land Use strategies *Transportation infrastructure *Exogenous factors *Land Use Strategies *Transportation infrastructure *Exogenous factors

Survey: Factors Influencing Travel Demand Travel Demand Model Policy Factors: Land uses Road projects Transit projects Transit projects Pricing Exogenous Factors: Gas prices Auto operating costs Age, income Vehicle fleet External travel

Survey: Factors Influencing Travel Demand (cont.)

Land Use Model

Policy Factors:
Land use policy:
Current zoning
Planned changes
Other changes

Exogenous Factors:
Residential location
(e.g. affordability
Development-related
(e.g., land cost, etc.)
Regional production
Other factors

Data Collection/ Monitoring

Land use, demographics, transportation use, transportation supply

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Assessment: Summary

- Dispels any impression that MPOs have comparable modeling capabilities.
- Points out where improvements can be, and are being, made.

Travel Demand and Land Use Models: Policy Factors

- Larger MPO's:
 - Reasonable sensitivity to key factors
 - Plans for model improvements
- Smaller MPO's:
 - Simpler models, without sensitivity to many key factors.
 - Very few capable of modeling transit. Many factors not applicable.
- No or untested capacity, or insensitivity to factor:
 - Micro-level land use factors (including many of the "Ds")
 - ITS and traffic management
 - Intercity transit
 - Pricing policies

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Travel Demand and Land Use Models: Exogenous Factors

- Larger MPOs:
 - Policy variables similar to travel model assessment
 - Models capture more exogenous factors
- Smaller MPOs:
 - Policy variables similar to travel model assessment
 - Models capture less exogenous factors
- No or untested capacity, or insensitivity to factor
 - external travel (originating out of region)
 - key economic factors
 - Vehicle fleet characteristics mostly done post hoc

Data Collection / Monitoring

Most common assessment:

"Inconsistent" (e.g., data are collected but not on a regular schedule or in a consistent way)

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Some Possible Questions for Discussion

- How should the RTAC deal with differing modeling capabilities relative to recommendations for targetsetting?
- Do all models need to have similar capabilities?
 - If yes, by when?
- What other methods might be used (in conjunction with models or separately) to help more accurately assess impacts of land use and transportation actions?
- Is there a need for common definitions and values (e.g., for exogenous factors like fuel price, income, estimates of external travel)?

Other Efforts

- Modeling improvement efforts
 - Assistance from State
 - Making the case for assistance
- Scenario development